Viper - ERT CAP Meter Apps

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Contents

OVERVIEW:

Viper Survey Controller is designed to receive information that is formatted as a CAP message. As such, ERT has developed several in-house "Meter Apps" which leverage data that exists on third-party web platforms as well as local databases. The ERT Meter Apps use a variety of methods to acquire both real-time and historic data from these third-party services and translates that data to a CAP message for use in Viper Survey Controller.

The ability to create in-house CAP Meter Apps not only extends the types of instruments that can be used with Viper beyond just those that already have a SafeENV LINC, but also enhances an existing deployment by including additional details such as nearby air quality readings or stream conditions, etc.

The ERT Meter Apps and guides are available for download from https://response.epa.gov/viper. Contact ERTSupport if you require access to the Viper website (ertsupport@epa.gov)

ERT USGS Water Meter App

With the ERT USGS Water Meter Application (Meter App), you are able to acquire and view observed stream conditions (water levels and discharges) throughout the United States and territories with information provided by USGS. Stream conditions on the USGS website are typically updated at increments of 15 minutes. The USGS Water Meter App provides you with the most recent readings from the selected site/s. USGS stream condition readings are added to Survey Controller similar to adding an instrument via Generic CAP. NOTE: The USGS Water Data is a third-party site that has no affiliation with EPA ERT.

https://waterdata.usgs.gov/nwis

ERT AirNow Meter App

The ERT Air Now Meter Application (Meter App) allows you to obtain observed air quality parameters in, and around, the United States with information provided by AirNow. The observed pollutants provided include the following (where available): ground level ozone, particle pollution (PM2.5 and PM10), carbon monoxide, nitrogen dioxide, and sulfur dioxide. AirNow updates the values of the parameters every hour from information administered by third-party sources. The ERT AirNow Meter App provides you with the most recent values of each parameter as shown on AirNow.gov. AirNow air quality readings are added to Survey Controller similar to adding an instrument via Generic CAP. NOTE: AirNow is a third-party site that has no affiliation with EPA ERT.

https://docs.airnowapi.org

ERT NOAA Meter App

Using the ERT NOAA Met Station Meter Application (Meter App) you can capture and display observed current weather conditions provided by the NOAA National Weather Service for about 1800 locations across the United States and US Territories. These weather conditions are typically updated on an hourly basis. The Meter App is added to a run in Survey Controller similar to adding an instrument via Generic CAP. NOTE: NOAA Weather Service is a third-party site that has no affiliation with EPA ERT.

https://w1.weather.gov/xml/current_obs

ERT INSITU Meter App

The ERT In-Situ Meter Application (Meter App) allows you to obtain transmited water quality data from a user-specified In-Situ sensor. The observed parameters include the following: pressure, temperature, level, and the telemetry device battery level. In- Situ updates the values of the parameters at an interval chosen by the account administrator, usually hourly, and can be set by contacting the In-Situ support center. The ERT In-Situ Meter application provides you with the most recent values of each parameter. Note: In-Situ is a third-party organization that has no affiliation with EPA ERT.

https://www.in-situ.com

ERT ENVIRONET Meter App

The ERT Environet Meter Application (Meter App) allows you to obtain air monitoring data that is transmitted to Netronix's Environet web platform. The Meter App can obtain these readings in 'real-time' from Environet as readings are being received to their Web Platform or, historic readings can be loaded after the fact, if so desired. The Meter App is added to a run in Survey Controller similar to adding an instrument via Generic CAP. Note: Environet is a third-party organization that has no affiliation with EPA ERT.

Netronix: https://netronix.io
Environet: https://environet.io

ERT TAGA (Trace Atmospheric Gas Analyzer) Meter App

The ERT Taga Meter Application (Meter App) allows you to transfer real-time and historic data from the TAGA system to Viper Survey Controller. The Meter App is added to a run in Survey Controller similar to adding an instrument via Generic CAP.

ERT MESOWEST Meter App

The ERT MesoWest Meter Application (Meter App) allows you to obtain MesoWest data from user-specified stations. The Meter App uses Mesonet API, by Synoptic to provide access to current and archived weather observations across the United States. Weather observations include but are not limited to: temperature, humidity, wind speed, wind direction, and precipitation, as well as access to environmental information. Data are collected from a variety of organizations. The Meter App is added to a run in Survey Controller similar to adding an instrument via Generic CAP.
Note: Mesowest/SynopticLabs is a third-party organization and has no affiliation with EPA ERT. https://mesowest.org/
https://synopticdata.com/national-mesonet-program

ERT Envista Meter App

This ERT Envista Meter Application (Meter App) leverages data from an organization's existing implementation of Envitech, Ltd's Envista Air Resource Manager (Envista ARM) software. As the exclusive North and Central American distributor of Envitech Ltd. Products, DR DAS implements Envista ARM installations and operations for multiple organizations. If an organization provides an API URL and API Key to their instance of a DR-DAS implemented Envista ARM, this Meter App can use the API to enable the data to flow from that organization to Viper. Note: Envista is a third-party organization and has no affiliation with EPA ERT.

DR DAS: www.dr-das.com

ERT SGS/Galson Meter App

The ERT SGS Galson Meter Application (Meter App) allows you to obtain air monitoring data being pushed to SGS Galson's web platform. The meter application can obtain readings "real-time" as readings are being pushed to their Web Platform, or historic readings can be loaded after the fact, if so desired. Note: SGS Galson is a third-party site that has no affiliation with EPA ERT.

https://www.sgsgalson.com

ERT MSI Drop Box Meter App

The ERT MSI (Mountain Studies Institute) Meter Application (Meter App) allows you to obtain and transmit data from a single Dropbox URL hosting a single .dat or .txt file(s). This MeterApp looks for the specific schema Mountain Studies used in its posted drop box files. Other schemas may require MeterApp customizations. Note: Mountain Studies Institute is a third-party site that has no affiliation with EPA ERT.

https://www.mountainstudies.org

ERT Samsara

The ERT Samsara Meter Application (Meter App) allows you to obtain air monitoring data being pushed to Samsara's web platform. The meter application can obtain readings in 'real-time' from their Web Platform, or historic readings can be loaded after the fact, if so desired. Note: Samsara is a third-party site that has no affiliation with EPA ERT.

https://www.samsara.com

ERT GroveStreams Meter App

The ERT GroveStreams Meter Application (Meter App) allows you to leverage data from GroveStreams. GroveStreams is an open platform cloud system that provides API access to a variety of devices. Note: GroveStreams is a third-party site that has no affiliation with EPA ERT.

https://www.grovestreams.com

ERT Magellen MX Meter App

The ERT Magellan MX Meter Application (Meter App) leverages real-time weather data from Columbia Weather System's Weather MicroServer device. The MicroServer device is connected to a weather station and can be configured for FTP Output of an XML file. The MeterApp acquires data via the XML FTP Output. Note: Columbia Weather Systems is a third-party manufacturer and has no affiliation with EPA ERT.

https://www.columbiaweather.com